

## **DYNAMIC RANGE REDUCING VOLUME CONTROL**

### **ABSTRACT**

[23] An audio amplifier is provided having a compressor with an automatically-adjustable compressor. Compression is linked to the volume control in an inverse relationship whereby, when the volume is reduced, the compression ratio is increased to boost the listening level of quieter passages in the source material. Conversely, when the volume is increased, the compression ratio is decreased. The compression control may be physically connected to the volume control, such as in a dual-potentiometer, or may be coupled electronically, such as with a digital signal processor. An effects level control may be included to allow a listener to increase or decrease the effect of the compression by applying a multiplier to the compression ratio. An ambient noise detector may also be included such that compression is increased as ambient noise increases or exceeds a predetermined level.